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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/724,177	12/01/2003	Wen Hung Lien	MR2863-137	9384
4586 7590 05/14/2007 ROSENBERG, KLEIN & LEE 3458 ELLICOTT CENTER DRIVE-SUITE 101 ELLICOTT CITY, MD 21043			EXAMINER LEE, CHUN KUAN	
			ART UNIT 2181	PAPER NUMBER
			MAIL DATE 05/14/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	10/724,177		LIEN, WEN HUNG	
	<b>Examiner</b>		<b>Art Unit</b>	
	Chun-Kuan (Mike) Lee		2181	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 05 March 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### **I. INFORMATION CONCERNING OATH/DECLARATION**

#### **Oath/Declaration**

1. The applicant's oath/declaration has been reviewed by the examiner and is found to conform to the requirements prescribed in **37 C.F.R. 1.63**.

### **II. INFORMATION CONCERNING DRAWINGS**

#### **Drawings**

2. The applicant's drawings submitted are acceptable for examination purposes.

### **III. REJECTIONS BASED ON PRIOR ART**

#### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1 and 3-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Liu et al. (US Patent. 6,704,814) in view of Shu et al. (US Patent 6,598,100) and "Sun Blade – Installation Guide".

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4. As per claim 1, Liu teaches a portable digital audio/video device adapted (Fig. 1) to be plugged into a computer device (Fig. 3, ref. PC) and removable from computer device, comprising:

a casing (housing 10 of Fig. 1) having an inner space (col. 3, l. 1);

a disk supporting plate (Fig. 1, ref. 20) for supporting a compact disk thereon, the compact disk having data with specific data format (e.g. music CD, VCD, MP3) (col. 1, ll. 58-59 and col. 3, ll. 38-40);

an operation panel with a display unit (display panel 31 of Fig. 1) and a button set (push button 32 of Fig. 1) (col. 3, ll. 16-17);

a control circuit with a corresponding audio/video data processing circuit (CPU 60 of Fig. 1) for encoding and decoding an audio/video signal in correspondence to the data stored in the compact disk (col. 3, ll. 32-40); and

means for connecting (output/input unit 90 of Fig. 1) the portable digital audio/video device and the computer device (Fig. 3, ref. PC), and transmitting the audio/video signal from the portable digital audio/video device to the computer device (Fig. 3, and col. 4, ll. 40-64);

wherein the computer device accesses and plays the signal generated by the control circuit when the portable digital audio/video device is connected the computer device (col. 4, ll. 40-64), and the portable digital audio/video device plays the audio/video signal independently when the portable digital audio/video device is removed from the access slot of the computer device (col. 4, ll. 21-39).

Liu does not teach the portable digital audio/video device comprising:

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an access slot;  
the disk supporting plate retractable into the inner space of the casing;  
the operation panel formed on a front end of the casing; and  
the control circuit identifying the data format of the data stored in the compact disk.

Shu teaches a optical disk player comprising:

operation button set is arranged on a front panel (col. 2, ll. 26-27); and  
a AV processor determining the format of the data read and triggering a  
corresponding decoding circuit according to the data format (col. 2, ll. 20-25).

Liu and Shu are analogous art because they are from the same field of endeavor as they are both associated with optical disk player.

It would have been obvious to one of ordinary skill in this art, at the time of invention was made to include Shu's AV processor into Liu's portable digital audio/video device.

The suggestion/motivation for doing so would have been for the benefit of integrating the function of DSC and MP3 into the optical disk player such as the portable digital audio/video device (Shu, col. 1, ll. 33-34).

Therefore, it would have been obvious to combine Shu with Liu for the benefit of integrating the function of DSC and MP3 into the optical disk player such as the portable digital audio/video device to obtain the invention as specified in claim 1.

"Sun Blade – Installation Guide" teaches a computer system comprising an access slot where a CD-ROM is installed, wherein the CD-ROM obviously have a tray for the receiving/ejecting of the CD, wherein the tray is retractable into the CD-ROM (Fig. 8 on page 12).

Liu and "Sun Blade – Installation Guide" are analogous art because they are from the same field of endeavor as they are both associated with optical disk player.

It would have been obvious to one of ordinary skill in this art, at the time of invention was made to include Sun Blade – Installation Guide's CD-ROM into Liu and Shu's portable digital audio/video device.

The suggestion/motivation for doing so would have been for the benefit of proper installation of the portable digital audio/video device into a computer system (page 12).

Therefore, it would have been obvious to combine "Sun Blade – Installation Guide" with Liu and Shu for the benefit of proper installation or the portable digital audio/video device into a computer system to obtain the invention as specified in claim 1.

5. As per claim 3, Liu, Shu and "Sun Blade – Installation Guide" teach all the limitations of claim 2 as discussed above, where Liu further teaches the portable digital audio/video device comprising wherein the audio/video data processing circuits at least comprises an MP3 data processing circuit (e.g. for MP3), an audio data processing circuit (e.g. for general music CDs), an audio/video data processing circuit (e.g. for VCD) (Liu, col.1, ll. 58-59 and col. 3, ll. 32-40).

6. As per claim 4, Liu, Shu and "Sun Blade – Installation Guide" teach all the limitations of claim 1 as discussed above, where Liu further teaches the portable digital audio/video device comprising wherein the casing of the device is equipped with an earphone slot (Liu, col. 4, ll. 31-39).

7. As per claim 5, Liu, Shu and "Sun Blade – Installation Guide" teach all the limitations of claim 1 as discussed above, where Liu and "Sun Blade – Installation Guide" further teach the portable digital audio/video device comprising wherein the connecting means comprises:

a first disk interface connector (Liu, Fig. 1, ref. 90), installed in the casing (Liu, Fig. 1, ref. 10) and connected to the control circuit (Liu, Fig. 1, ref. 60) (Liu, col. 3, ll. 51-56); and

a second disk interface connector, installed inside the access slot of the computer device, and connected to the first disk interface connector of the casing (Sun Blade – Installation Guide, page 6, Fig. 4 and page 12, Fig. 8), wherein the second disk interface connector is the IDE1 to be utilized for the connection to the CD/DVD-ROM drive.

8. As per claim 6, Liu, Shu and "Sun Blade – Installation Guide" teach all the limitations of claim 1 as discussed above, where Liu and "Sun Blade – Installation

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Guide" further teach the portable digital audio/video device comprising wherein the connecting means comprises:

a first USB port connector (Liu, Fig. 1, ref. 90), installed inside the casing (Liu, Fig. 1, ref. 10) and connected to the control circuit (Liu, Fig. 1, ref. 90) (Liu, col. 3, ll. 51-56); and

a second USB port connector, installed inside the access slot of the computer device and connected to the first USB port connector of the casing (Liu, col. 3, ll. 51-56; Sun Blade – Installation Guide, page 6, Fig. 4 and page 12, Fig. 8), as the IDE1 to be utilized for the connection to the CD/DVD-ROM drive is implemented as the USB port connector.

9. As per claim 7, Liu, Shu and "Sun Blade – Installation Guide" teach all the limitations of claim 1 as discussed above, where Liu further teaches the portable digital audio/video device further comprising an analog audio/video signal output connector (Liu, Fig. 1-2, ref. 90), installed in the casing (Liu, Fig. 1, ref. 10), and connected to the control circuit (Liu, Fig. 1-2, ref. 60), the analog audio/video signal output connector further comprising an audio signal socket (e.g. socket connect to the earphone or speaker) (Liu, Fig. 2, ref. 90, 82) and a video output slot (e.g. slot connect to the TV) (Liu, Fig. 1, ref. 90, 81) for outputting the analog audio/video signals (col. 4, ll. 21-30), as the signal is outputted to the TV and speaker.



10. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Liu et al. (US Patent. 6,704,814) in view of Shu et al. (US Patent 6,598,100) and "Sun Blade – Installation Guide" as applied to claim 1 above, and further in view of Shing (US Pub.: 2005/0076304).

Liu, Shu and "Sun Blade – Installation Guide" teach all the limitations of claim 1 as discussed above, where Liu and Shu further teach the portable digital audio/video device comprising:

means for reading (Shu, adapting interface 2 of Fig. 1) the data stored in the disk (Shu, col. 1, l. 64 to col. 2, l. 5);

a disk data format identification circuit (Shu, Fig. 1, ref. 12), for identifying the read data format of the data stored in the disk (Shu, col. 2, ll. 20-25); and

a demultiplexor (Liu, Fig. 2, ref. 50) having an input port connected to the data reading means and a plurality of output data paths (Liu, Fig. 2, ref. 80, 90), for selecting one of the data paths based on the identified data format of the read data (Shu, Fig. 3, ref. 12, 16, 30 and col. 3, ll. 7-12);

a decoding circuit (Shu, Fig. 3, ref. 16) connected to the corresponding output data path of the demultiplexor processing and decoding the read data transmitted from the demultiplexor (Shu, col. 2, ll. 36-39 and col. 3, ll. 7-12); and

a digital-to-analog converter (DAC) (Fig. 1, ref. 18) for converting the audio data prior to outputting as an analog audio signal (Shu, col. 2, ll. 44-51).

Liu, Shu and "Sun Blade – Installation Guide" do not teach the portable digital audio/video device comprising:

a plurality of audio/video data processing circuits;

a multiplexor having a plurality of input data paths connected to the audio/video data processing circuits respectively and an output port, for receiving the processed audio/video data from one of the data processing circuits and transmitting the processed audio/video data at its output port; and

means for converting the audio/video data transmitted from the output port of the multiplexor into an analog audio/video signals.

Shing teaches a system and method comprising a demultiplexor (Fig. 2, ref 216) connected to a plurality of audio/video decoders (Fig. 2, ref. 220, 222, 224, 226, 228); a audio renderer (Fig. 2, ref. 230) and a video renderer (Fig. 2, ref. 232) receiving decoded outputs from the plurality of audio/video decoders and outputting the corresponding audio (Fig. 2, ref. 234) and video (Fig. 2, ref. 236) (Fig. 2 and [0029]), wherein it would have been obvious for the audio renderer and the video renderer to include a multiplexor or the like in order to properly route one of the received decoded data to the output;

Liu and Shing are analogous art because they are from the same field of endeavor as they are both associated with reading data from an optical disk.

It would have been obvious to one of ordinary skill in this art, at the time of invention was made to include Shing's decoders and renderers into Liu, Shu and Sun Blade – Installation Guide's portable digital audio/video device. The resulting combination of the references further teaches the portable digital audio/video device comprising:

the demultiplexor receiving data from the optical disk and selecting the output path for the received data to one of the plurality of audio/video decoders based on the identified data format of the read data;

the audio and video renderers would obvious multiplexing the received data from the plurality of input data paths connected to the plurality of audio/video decoders for outputting the corresponding audio and video data; and

the DAC coupled to the output of the audio and obvious video renderer for converting the data to the analog audio and video signals.

The suggestion/motivation for doing so would have been for the benefit of remote playing of an optical disk such as a DVD or a Video CD ([0006]).

Therefore, it would have been obvious to combine Shing with Liu, Shu and Sun Blade – Installation Guide for the benefit of remote playing of an optical disk such as a DVD or a Video CD to obtain the invention as specified in claim 2.

#### **IV. CLOSING COMMENTS**

##### **Conclusion**

##### **a. STATUS OF CLAIMS IN THE APPLICATION**

The following is a summary of the treatment and status of all claims in the application as recommended by M.P.E.P. 707.07(i):

##### **a(1) CLAIMS REJECTED IN THE APPLICATION**

Per the instant office action, claims 1-7 have received a first action on the merits and are subject of a first action non-final.

##### **b. DIRECTION OF FUTURE CORRESPONDENCES**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chun-Kuan (Mike) Lee whose telephone number is (571) 272-0671. The examiner can normally be reached on 8AM to 5PM.


#### **IMPORTANT NOTE**

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Donald Sparks can be reached on (571) 272-4201. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

May 08, 2007

Chun-Kuan (Mike) Lee  
Examiner  
Art Unit 2181

A handwritten signature in black ink, appearing to read "Donald Sparks", is written over a large, stylized circular flourish.

DONALD SPARKS  
SUPERVISORY PATENT EXAMINER